Panasonic

Surface Mount Type

SP-Cap

Series:FD,CD,UD,UE

Country of Origin



■ Features Low ESR

Excellent Noise-absorbent Characteristics

Japan Singapore

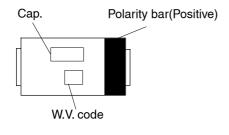


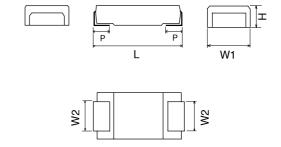
■ Specification

Series & Size Code	FD	С	D	ι	JD	UE					
Category Temp.Range	-40 to 105°C										
Rated W.V.Range	2 to 12.5V.DC 2 to 16V.DC 2 to 8V.DC 2 to										
Nominal Cap.Range	15 to 68µF	2.2 to	150µF	68 to	330µF	100 to 470μF					
Capacitance Tolerance	-	±20 %									
DC Leakage Current	rent I ≤0.06 CV 2minutes(2 to 4V.DC) I ≤0.04CV or 3μA 2minutes(6.3 to 16V.DC) (Whichever is greater)										
Surge Voltage	Rated Working Voltage × 1.25 (15 to 35°C)										
tan δ	$\leq 0.06(120 \text{Hz}/+20^{\circ}\text{C}) \qquad \qquad \leq 0.10(120 \text{Hz}/+20^{\circ}\text{C})$										
Endurance	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	After applying rated working voltage for 1000 hours at 105±2°C, and then being stabilized at +20°C,									
(105 °C1000hours W.V.)	capacitor shall meet the foll	lowing limits.									
	Capacitance change	Capacitance change ±10% of initial measured value									
	tan δ	tan δ ≤ Initial specified value									
	DC leakage current ≤ Initial specified value										
	After storing for 500 hours at 60°C,90%R.H.										
Moisture resistance	Capacitance change	2, 2.5V.DC	4 V.DC	6.3V.DC	8 to 16V.DC	;					
	of initial measurd value	+70, -20%	+60, -20%	+50, -20%	+40, -20%						
	tan δ	≤ 200% of initial specified value									
	DC leakage current	≦ Initial specified value									

■ Marking

■ Dimensions in mm(not to scale)





(mm)

Series & Size Code	L±0.2	W1±0.2	W2±0.1	Н	P±0.3
FD	7.3	4.3	2.4	1.1±0.1	1.3
CD	7.3	4.3	2.4	1.8±0.1	1.3
UD	7.3	4.3	2.4	2.8±0.2	1.3
UE	7.3	4.3	2.4	4.2±0.1	1.3

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■ Standard Products

Series &	Rated	Capacitance	Case Size		ze	Specif	ication	Part number	Min.Packaging Qíty
Size Code	W.V. (V.DC)	(±20%)	L	W	Н	Ripple current	ESR	Fait number	(pcs)
		(µF)	(mm)	(mm)	(mm)	(A r.m.s./100kHz +20 to +105°C)	Ω		(pcs)
	2	00	7.0	4.0	1.1	· ·	(100kHz/+20°C) 0.028	EEFFD0D680R	0500
-		68	7.3	4.3	1.1	2.0	0.028	EEFFD0E560R	3500
	2.5	56	7.3	4.3	1.1		0.028	EEFFD0G390R	3500
FD	4	39	7.3	4.3		2.0	0.028	EEFFD0G390R	3500
	6.3	47	7.3	4.3	1.1	2.0	0.028	EEFFD0J330R	3500
	8	33	7.3	4.3	1.1	2.0	0.028	EEFFD03330R	3500
	12.5	22	7.3	4.3	1.1	2.0	0.020	EEFFD1B150R	3500
	12.5	15	7.3	4.3		1.4 2.5	0.040	EEFCD0D101R	3500
		100	7.3	4.3	1.8	2.7	0.015	EEFCD0D101K	3500
	2	100	7.3	4.3	1.8	2.7	0.013	EEFCD0D101XR	3500
	2	120	7.3	4.3	1.8	2.5	0.015		3500
		120	7.3 7.3	4.3	1.8	2.7		EEFCD0D121XR	3500
		150	7.3	4.3	1.8	2.5	0.018	EEFCD0D151R	3500
		82		4.3	1.8	2.7	0.018	EEFCD0E820R	3500
	0.5	82	7.3	4.3	1.8		0.015	EEFCD0E820XR	3500
	2.5	100	7.3	4.3	1.8	2.5	0.018	EEFCD0E101R	3500
		100	7.3		1.8	2.7	0.015	EEFCD0E101XR	3500
		120	7.3	4.3	1.8	2.5	0.018	EEFCD0E121R	3500
		56	7.3	4.3	1.8	2.5	0.018	EEFCD0G560R	3500
		56	7.3	4.3	1.8	2.7	0.015	EEFCD0G560XR	3500
		68	7.3	4.3	1.8	2.5	0.018	EEFCD0G680R	3500
	4	68	7.3	4.3	1.8	2.7	0.015	EEFCD0G680XR	3500
		82	7.3	4.3	1.8	2.5	0.018	EEFCD0G820R	3500
CD		82	7.3	4.3	1.8	2.7	0.015	EEFCD0G820XR	3500
		100	7.3	4.3	1.8	1.8 1.4	0.025	EEFCD0G101R	3500
		10	7.3	4.3	1.8	1.6	0.055	EEFCD0J100R	3500
	6.3	22	7.3	4.3	1.8	2.0	0.040	EEFCD0J220R EEFCD0J330R	3500
		33	7.3	4.3	1.8	2.5	0.028	EEFCD0J330R EEFCD0J470R	3500
		47	7.3 7.3	4.3	1.8		0.018		3500
		47	7.3	4.3	1.8	2.7	0.015	EEFCD0J470XR	3500
		68	7.3	4.3		2.5	0.018	EEFCD0J680R	3500
	8	68			1.8	2.7	0.015	EEFCD0J680XR	3500
		8.2	7.3 7.3	4.3	1.8	1.4	0.055	EEFCD0K8R2R	3500
		15		4.3		1.6	0.040	EEFCD0K150R	3500
		22	7.3	4.3	1.8	2.0	0.028	EEFCD0K220R	3500
		33	7.3	4.3		2.5	0.018	EEFCD0K330R	3500
-		47	7.3	4.3	1.8	1.8	0.025	EEFCD0K470R	3500
	12.5	4.7	7.3	4.3	1.8	1.0	0.080	EEFCD1B4R7R	3500
		10	7.3	4.3	1.8	1.0	0.060	EEFCD1B100R	3500
		15	7.3	4.3	1.8	1.3	0.050	EEFCD1B150R	3500
		22	7.3	4.3	1.8	1.6	0.030	EEFCD1B220R	3500
	16	2.2	7.3	4.3	1.8	1.0	0.110	EEFCD1C2R2R	3500
		4.7	7.3	4.3	1.8	1.0	0.080	EEFCD1C4R7R	3500
		6.8	7.3	4.3	1.8	1.0	0.070	EEFCD1C6R8R	3500
		8.2	7.3		1.8	1.3	0.045	EEFCD1C8R2R	3500
UD	2	180	7.3	4.3	2.8	3.0	0.015	EEFUDOD181R	2000
		180	7.3	4.3	2.8	3.3	0.012	EEFUD0D181XR	2000
		220	7.3	4.3	2.8	3.0	0.015	EEFUD0D221R	2000
		220	7.3	4.3	2.8	3.3	0.012	EEFUDOD221XR	2000
		270	7.3	4.3	2.8	3.0	0.015	EEFUDOD271XB	2000
		270	7.3	4.3	2.8	3.3	0.012	EEFUDOD271XR	2000
		330	7.3	4.3	2.8	3.0	0.015	EEFUD0D331R	2000

Design, and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and / or use. Should a safety concern arise regarding this product, please be sure to contact us immediately.

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■ Standard Products

	Rated	Capacitance	Case Size		ze	Specification		Dant musels an	
Series & Size Code	W.V. (V.DC)	(±20%) (μF)	L (mm)	W (mm)	H (mm)	Ripple current (A r.m.s./100kHz	ESR Ω	Part number	Min.Packaging Qí ty (pcs)
	(٧.٥٥)	(/	(11111)	(11111)	()	+20 to +105°C)	(100kHz/+20°C)		
	2	330	7.3	4.3	2.8	3.3	0.012	EEFUD0D331XR	2000
		150	7.3	4.3	2.8	3.0	0.015	EEFUD0E151R	2000
		150	7.3	4.3	2.8	3.3	0.012	EEFUD0E151XR	2000
	2.5	180	7.3	4.3	2.8	3.0	0.015	EEFUD0E181R	2000
		180	7.3	4.3	2.8	3.3	0.012	EEFUD0E181XR	2000
		220	7.3	4.3	2.8	3.0	0.015	EEFUD0E221R	2000
		220	7.3	4.3	2.8	3.3	0.012	EEFUD0E221XR	2000
UD		270	7.3	4.3	2.8	3.0	0.015	EEFUD0E271R	2000
OD		120	7.3	4.3	2.8	3.0	0.015	EEFUD0G121R	2000
		120	7.3	4.3	2.8	3.3	0.012	EEFUD0G121XR	2000
	4	150	7.3	4.3	2.8	3.0	0.015	EEFUD0G151R	2000
		150	7.3	4.3	2.8	3.3	0.012	EEFUD0G151XR	2000
		180	7.3	4.3	2.8	2.5	0.018	EEFUD0G181R	2000
		100	7.3	4.3	2.8	3.0	0.015	EEFUD0J101R	2000
		100	7.3	4.3	2.8	3.3	0.012	EEFUD0J101XR	2000
	6.3	120	7.3	4.3	2.8	3.0	0.015	EEFUD0J121R	2000
	0.0	120	7.3	4.3	2.8	3.3	0.012	EEFUD0J121XR	2000
		150	7.3	4.3	2.8	2.5	0.018	EEFUD0J151R	2000
	8	68	7.3	4.3	2.8	3.0	0.015	EEFUD0K680R	2000
		100	7.3	4.3	2.8	2.5	0.018	EEFUD0K101R	2000
	2	270	7.3	4.3	4.2	3.3	0.012	EEFUE0D271R	2000
		270	7.3	4.3	4.2	3.5	0.010	EEFUE0D271XR	2000
		330	7.3	4.3	4.2	3.3	0.012	EEFUE0D331R	2000
		330	7.3	4.3	4.2	3.5	0.010	EEFUE0D331XR	2000
		390	7.3	4.3	4.2	3.3	0.012	EEFUE0D391R	2000
		390	7.3	4.3	4.2	3.5	0.010	EEFUE0D391XR	2000
		470	7.3	4.3	4.2	3.3	0.012	EEFUE0D471R	2000
		470	7.3	4.3	4.2	3.5	0.010	EEFUE0D471XR	2000
		220	7.3	4.3	4.2	3.3	0.012	EEFUE0E221R	2000
		220	7.3	4.3	4.2	3.5	0.010	EEFUE0E221XR	2000
UE		270	7.3	4.3	4.2	3.3	0.012	EEFUE0E271R	2000
	2.5	270	7.3	4.3	4.2	3.5	0.010	EEFUE0E271XR	2000
		330	7.3	4.3	4.2	3.3	0.012	EEFUE0E331R	2000
		330	7.3	4.3	4.2	3.5	0.010	EEFUE0E331XR	2000
		390	7.3	4.3	4.2	3.3	0.012	EEFUE0E391R	2000
		180	7.3	4.3	4.2	3.3	0.012	EEFUE0G181R	2000
_	4	180	7.3	4.3	4.2	3.5	0.010	EEFUE0G181XR	2000
		220	7.3	4.3	4.2	3.3	0.012	EEFUE0G221R	2000
		220	7.3	4.3	4.2	3.5	0.010	EEFUE0G221XR	2000
		270	7.3	4.3	4.2	3.0	0.015	EEFUE0G271R	2000
		150	7.3	4.3	4.2	3.3	0.012	EEFUE0J151R	2000
	6.3	150	7.3	4.3	4.2	3.5	0.010	EEFUE0J151XR	2000
		180	7.3	4.3	4.2	3.3	0.012	EEFUE0J181R	2000
		180	7.3	4.3	4.2	3.5	0.010	EEFUE0J181XR	2000
		220	7.3	4.3	4.2	3.0	0.015	EEFUE0J221R	2000
		100	7.3	4.3	4.2	3.3	0.012	EEFUE0K101R	2000
	8	150	7.3	4.3	4.2	3.0	0.015	EEFUE0K151R	2000